ENVIRONMENTAL WATER SYSTEMS™

The Leader In Whole Home Water Filtration.

Since 1987

PRODUCT AND INSTALLATION MANUAL

ESSENTIAL Drinking Water Filtration Systems

Model Numbers:

DWS, DWS-UV

ALL FILTRATION PRODUCT PROUDLY MADE & ASSEMBLED IN THE USA

EWS, Inc./Environmental Water Systems

Office. 702.256.8182
Monday - Friday, 8:30 am - 4:30 pm Pacific Standard Time
Fax. 702.256.3744
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Retain this Product & Installation Manual for Maintenance and Information
Please Register this Product - It is a Requirement for Warranty

Revised 1/2012

ENVIRONMENTAL WATER SYSTEMS®
The Leader in Whole Home Water Filtration Since 1987.

ESSENTIAL Drinking Water

It's not just about taste. Introducing the first and only drinking water system offering true protection from toxic contaminants.

- World-class EWS quality and performance.
- Highest quality carbon filtration available.
- Hassle-free and low maintenance.
- Quick and easy installation.
- Made in the USA, meets or exceeds all compliances.
- Protects you from chloramine (chlorine and ammonia compound), chlorine, THMs, VOCs, pesticides, lead, cysts, rust, silt, sediment, bacteria and viruses[1], and more.[2]

Chlorine (a common disinfectant used in USA tap water) and its byproducts are known carcinogens. Drinking them, or inhaling and absorbing them while showering or bathing, is not recommended. The New York State Dept. of Health and President's Cancer Panel recommend water filtration to reduce or eliminate our exposure to these substances.*

NO MORE WASTED MONEY. NO MORE PLASTIC BOTTLES.

With the **ESSENTIAL** at your sink, you will save at least $500 every year in bottled water expenses and prevent plastic waste in our landfills and oceans. Simply fill up your resusable bottle at your sink and go!

HASSLE-FREE ENJOYMENT.

No costly monthly bottle delivery. No frequent filter replacements. No taking up valuable refrigerator or countertop space. Just quality filtered water every day for drinking, cooking, making your morning coffee, watering the plants... you name it, **ESSENTIAL** is there for you.

PROTECTION FOR YOU, YOUR HOME, AND OUR PLANET.

The **ESSENTIAL** is designed for today's adverse water conditions and anticipated conditions in the future and is – without a doubt – the most advanced and highest quality filtration product available, capable of handling chloramine, chlorine, dyes, fuels, pharmaceutical residues, lead, cysts, bacteria[1] and more.[2] The result is truly clean water you can trust and enjoy.

ADVANCED FILTRATION AND PERFORMANCE.

The **ESSENTIAL** was designed from the ground up with our full bed depth, fully compliant, USA-made filters to handle difficult contaminants like chloramine (chlorine and ammonia compound). It is the very first sink filtration system that effectively protects you from chloramine, chlorine, THMs, lead, cysts, bacteria[1] and much more.[2]

***FILTER ALL THE WATER IN YOUR HOME WITH ONE SYSTEM.** Every sink, shower, and bath in your home could provide you with chlorine-free & pollutant-free water. No hassle, no maintenance, no salts or chemicals, and trusted by hospitals, health care centers, military, and private homes worldwide. For more information on EWS Central Water Filtration, visit us online at www.ewswater.com or call EWS customer service at 702.256.8182 (Mon.-Fri. 8.30 am - 4.30 pm Pacific Time).

TECHNICAL INFORMATION
ESSENTIAL DRINKING WATER FILTRATION SYSTEMS
MODEL #s: DWS and DWS-UV

SYSTEM SPECIFICATIONS
OPERATION TEMPERATURE: Maximum 100° F (38° C) / Minimum 40° F (4° C)
OPERATION PRESSURE: Maximum 75 psi / Minimum 30 psi
SYSTEM FLOW RATE: <1.0 gallons per minute (gpm)
Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Replace your filters and UV lamp annually or as needed (do not exceed 1 year). Install in cold water supply only. Install in compliance with local and state regulations.

All installation instructions, service manuals, technical and product information is available online at **www.EWSWATER.com**

MODEL #	REPLACEMENT FILTER SET #
DWS	F.SET.DWS (includes: F-PRESED, F-GAC, F-GAC-B)
DWS-UV	F.SET.DWS-UV (includes: F-PRESED, F-GAC, F-GAC-B, F-LAMP)

SERVICE LIFE ON FILTERS: UP TO 1 YEAR.* REPLACE YOUR FILTERS ANNUALLY OR AS NEEDED. DO NOT EXCEED 1 YEAR.

FILTER SPECIFICATIONS

Fully Compliant with California No-Lead Standards.

NSF COMPONENT
This filter element tested and certified under ANSI/NSF Standard 42 & 53 for materials only.

STAGE 1 ITEM #: F-PRESED
DESCRIPTION: Pre-Sediment (5 Micron)
PURPOSE: Filters out rust, silt, and sediment.
FEATURES & BENEFITS: Enhances the performance of the following filters.
CONSTRUCTION: 100% pure polypropylene fibers. No fillers or binders. Meets FDA requirements for all food and beverage contact.
SERVICE LIFE: 1 year‡
MAX. FLOW: <1.0 GPM / 3.4 LPM **MAX. PRESSURE:** 75 PSIG / 5.17 Bar **TEMPERATURE RANGE:** 40-100° F / 4-38° C

STAGE 2 ITEM #: F-GAC
DESCRIPTION: Pre-Filter Advanced Carbon
PURPOSE: Filters chlorine, chloramine, and VOCs for clear, clean water. Reduces and/or eliminates bad tastes and odors.
FEATURES & BENEFITS: Increased surface area, almost no fines release, enhanced adsorption, excellent performance.
CONSTRUCTION: Advanced carbon.
SERVICE LIFE: 1 year‡
MAX. FLOW: <1.0 GPM / 3.4 LPM **MAX. PRESSURE:** 75 PSIG / 5.17 Bar **TEMPERATURE RANGE:** 40-100° F / 4-38° C

STAGE 3 ITEM #: F-GAC-B
DESCRIPTION: Post-Filter Carbon Block (1 Micron)
PURPOSE: Advanced final stage filter for chlorine, chloramine (chlorine and ammonia compound), lead, cysts, VOCs, and more.
FEATURES & BENEFITS: Increased surface area, enhanced adsorption, excellent performance in a carbon block form.
CONSTRUCTION: Activated carbon block.
SERVICE LIFE: 1 year‡
MAX. FLOW: <1.0 GPM / 3.4 LPM **MAX. PRESSURE:** 75 PSIG / 5.17 Bar **TEMPERATURE RANGE:** 40-100° F / 4-38° C

ITEM #: F-LAMP (OPTIONAL, INCLUDED WITH MODEL #: DWS-UV)**
DESCRIPTION: Ultraviolet (UV) Disinfection**
PURPOSE: Kills bacteria, viruses, and other microorganisms.
FEATURES & BENEFITS: Independently tested to reduce E. coli by 99.99992% and micrococcus luteus by 99.93%.
CONSTRUCTION: UV lamp encased in glass and 316 bonded stainless steel interior housing.
SERVICE LIFE: 1 year‡ **MAX. FLOW:** <1.0 GPM / 3.4 LPM
MAX. PRESSURE: 75 PSIG / 5.17 Bar
TEMPERATURE RANGE: 40-100° F / 4-38° C

The ESSENTIAL comes fully assembled and complete with everything you need for a proper installation: chrome faucet dispenser (finish options available), angle stop valve connection, red and blue tubing (5 ft. each), mounting bracket, and all filters.

‡Filter service life is based on local water conditions and usage.
***UV upgrade is available pre-assembled as model# DWS-UV. A UV upgrade kit can be added to any DWS system at any time.*

[1] UV upgraded systems only.
[2] These substances may or may not be in your water. Please ensure this is the correct system for your needs. Please see included instructions for proper installation and usage.

SYSTEM SIZE: 5" deep x 16" tall x 13" wide (allow 4" clearance at the bottom of the unit for filter replacement maintenance)
SHIPPING CARTON SIZE: 14" x 11" x 11"
SHIPPING CARTON WEIGHT: 8 lbs.

Pictured at Right:
The **ESSENTIAL RO3**.

Our **ESSENTIAL Reverse Osmosis** systems are available to suit specific water conditions or personal preferences. Please contact EWS Customer Service for more information.

MADE IN THE USA

CALL EWS CUSTOMER SERVICE: 702.256.8182 (MONDAY-FRIDAY 8.30 AM-4.30 PM PACIFIC TIME)
FAX: 702.256.3744 EMAIL: CUSTOMERSERVICE@EWSWATER.COM
WWW.EWSWATER.COM

A Special Message to Our Customers

EWS, Inc. and Environmental Water Systems would like to thank you for your consideration in selecting from our comprehensive list of residential filtration and conditioning product. We recommend that you take the time to read the information that pertains to your product as you begin to use it.

The information in this manual is designed to assist your installer to set-up, install and start-up your system properly. In addition, the information contained in this manual is designed to provide the consumer, the most comprehensive information on this series of product. Please contact us if you have any questions, comments or additions to the information provided.

Sincerely,
Customer Service at EWS, Inc.

Installation of the Filtration System - Please Read the Enclosed Information

Please take the time to familiarize yourself with the unit you are about to install. Locate the box with the filter top (head assembly) and if applicable, the UV unit and the box with all the filter cartridges, tubing, angle stop valve and if applicable UV transformer.

You may need the following for proper installation:
• Teflon tape • Work Gloves • Safely Glasses • Knife or scissors • Adjustable Wrench • Pliers • Screwdriver; straight & phillips • Drill & drill bits

WARNING: Verify that all components are included with the unit and were not lost, misplaced, or damaged in shipping or handling. Any damage in shipping needs to be reported to the shipping company.

WARNING: Do not attempt to install this system using defective or damaged components. Check and inspect, inlet and outlet fittings and any other connections on this system that might have been damaged during shipping and handling. Check all these components again upon installation and start-up for any hidden issues. All plumbing should be done in accordance with all local plumbing codes. Water Pressure: minimum 40psi, maximum 75psi. Water Temperature Range (cold supply only): not to exceed 100°F or below 40°F. Electrical (if applicable): an uninterrupted a/c supply, (if applicable): make sure voltage supply is compatible with your unit prior to install

WARRANTY: Warranty Registration of this product is required to have a warranty. A proper installation and start-up will save you time, money and hassles, and is also required for warranty purposes. Any issue as a result of improper application, set-up, installation and/or start-up will void any warranty.

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Placement or Locating the Dispenser/Faucet

Professional Installation is Strongly Recommended

Preferred - Select a standard sink location to mount the faucet.
It is recommended that the faucet be placed in a hole provided on most sinks similar to the ones used for a sprayer, soap dispenser and/or dishwasher air gap. If the hole or space is unavailable, an alternative location will be required:

MINIMUM HOLE REQUIRED 1/2", MAXIMUM 1 3/8"

Option A: On the sink. This option is to drill a new hole into the sink rim itself, if space allows.

Option B: On the countertop next to a sink. This option is to position the faucet spout in the correct location to drain into the sink. This requires a clearance around the faucet both above and below the countertop. Use the supplied dispenser as a template or see the enclosed dispenser schematic and dispenser dimensions.

Prepare to drill the hole using the dispenser as a template.

• Sinks can be made of, but not limited to, stainless steel, copper, porcelain/steel, enamel/cast iron, man-made surfaces, stone, concrete, and/or materials known or unknown at this time.

• Countertops can be made of, but not limited to, or be a combination of, natural stone, enamel, porcelain, concrete, wood, metals and/or man-made materials known or unknown at this time.

CAUTION:

Please consult with the sink or countertop manufacture, supplier, fabricator, or installer for proper drilling techniques and methods.
EXTREME CARE MUST BE TAKEN IN DRILLING THE HOLE FOR ANY SURFACE. THE SURFACE MATERIALS OF SINKS AND COUNTERTOPS CAN CHIP OR CRACK. THE MANUFACTURER ASSUMES NO RESPONSIBILITY FOR ANY DAMAGE RESULTING FROM THIS INSTALLATION.

WARNING:
USE SAFETY GLASSES OR OTHER EYE PROTECTION WHEN GRINDING OR DRILLING TO PREVENT POSSIBLE EYE INJURY DUE TO FLYING PARTICLES.

Note Dispenser Operation: Spout pulls out from faucet body and has 2 o-rings at base. Insert completely into bottom of faucet body to prevent leaking. Spount swivels to direct water. Handle and tip can be removed. Handle can be locked in open position for continuous flow.

Dispenser/Faucet Q & A

Q: I do not want to drill any extra holes or use a separate dispenser/faucet - what can I do?

A: An alternative to installing and using the dispenser/faucet is to consider a direct connection to your existing kitchen (cold side) faucet. Connect the supply from the cold water angle stop to feed/inlet side of the filtration system as directed in this manual. Then connect the filtered/outlet side to the cold feed side of the kitchen faucet. Special fiitings, that are readily available to the plumbing professional, will be required to fit this application based on line size and materials used.

WARNING:
This is not a preferred method due to a more complicated install, lower flow rates to your kitchen faucet and most importantly, the possibility of water quality issues as a result of the aerator at the end of the kitchen faucet not intended for filtered water.

Note:
There will be a diminishment in your flow rate to the cold side of the faucet (kitchen faucet has a flow rate of up to 2.3 gallons per minute and the filtered water is delivered up to 1 gallon per minute). To get filtered water you must be sure you have the faucet to the cold side only. This application or option may not be applicable for reverse osmosis systems.

Q: I would like to use another dispenser/faucet?

A: Based on many styles and finishes, a consumer may have another dispenser they would like to use. No problem, all these items have universal or industry standard fittings, or if not, can be easily adapted to fit.

Standard Dispenser included: EWS, Inc. includes a standard chrome, long-reach, lead-free faucet with white handle and tip.
Options Available: EWS provides the following options to match other items at an additional charge:
Change your white tip and handle to black. Change your faucet to the following finshes; satin nickel, polished nickel, polished brass, or oil rubbed bronze (all with black handle and tip). Inquire with your local EWS, Inc. distributor, contact an authorized internet distributor or visit us on the web.

Q: Can we connect the filtered water up to other devices?

A: Yes, simply connect by a "T" connection, the filtered water line to any instant hot, chiller, ice-maker, refrigerator, etc. Regarding flow rate, be mindful of too many (3 or more) connections and/or any length limitations in excess of 15 feet to any item that may create issues with delivery rates. See our Point of Entry, Whole Home Appliances to filter all the fixtures within the home.

Installation of the Supplied Dispenser/Faucet

Step by step instructions to mount and secure the supplied dispenser/faucet
If using another faucet, please review the instructions included with that product**

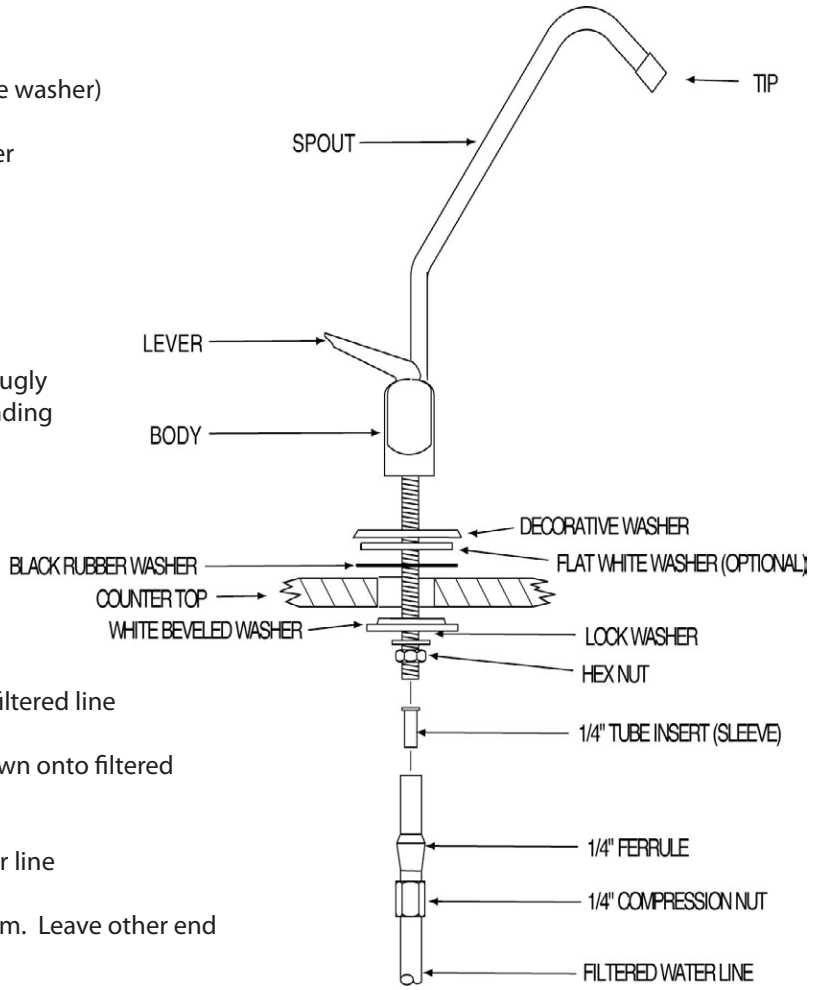
Step 1: Locate Faucet Parts Bag
Parts Included:
faucet body with handle, faucet spout with tip, decorative washer, black rubber washer, white beveled washer, lock washer, hex nut, 1/4" tube insert sleeve, 1/4" plastic compression ferrule, 1/4" compression nut
Optional Part: flat white washer
(for use under decorative washer depending on hole/application)

Enclosed Dispenser/Faucet Dimensions***

Height:	from deck to top of dispenser	8"
	from deck to tip of dispenser	6 1/4"
Reach:	from center of dispenser to tip	6"
Hole:	minimum required	1/2"
	maximum	1 3/8"

Above the Surface
Step 2:
Place decorative washer to bottom of faucet body
(optional: place flat white washer under decorative washer)
Step 3:
Place black rubber washer below decorative washer
(or below optional flat white washer)
Step 4:
Place faucet stem through hole and center

Below the Surface
Step 5:
Insert white beveled washer, bevel side up to fit snugly into a (1 3/8") pre-drilled hole or flat side up depending on the application
Step 6:
Place lock washer on this white beveled washer
Step 7:
Spin hex nut onto faucet stem and tighten hex nut and washers into place



Step 8:
Slide 1/4" compression nut (threads up) onto 1/4" filtered line
Step 9:
Slide 1/4" plastic compression ferrule, long side down onto filtered water tube. Ferrule will seat into compression nut
Step 10:
Insert 1/4" tube insert sleeve into 1/4" filtered water line
Step 11:
Insert 1/4" blue (filtered water) tube into faucet stem. Leave other end available for system interconnection
Step 12:
Thread 1/4" compression nut onto faucet stem and tighten

CAUTION: Do not overtigthen fittings

Note: Spout pulls out from faucet body and has 2 o-rings at base. Insert completely into bottom of faucet body to prevent leaking. Spount swivels to direct water. Handle and tip can be removed. Handle can be locked up in open position.

** Other faucets check with specifications. ***All dimensions are approximate.

Placement/Where to Install the Water System

Simply place the water system on a level floor, cabinet bottom or horizontal surface.

Always assume for enough space and tubing to remove, move and/or adjust the system for filter replacement and maintenance.

If mounting the system to a wall, cabinet side or other vertical surface, a minimum clearance of 4" will be required to allow for filter replacement. Please see the following procedures:

Step 1
All filter cartridges for the system are included. For Model # DWS-UV only, UV Lamp and Housing are pre-installed.

Locate the 3 filter cartridges. Starting from the left or "FEED" side, Stage 1 insert the blue labeled pre-sediment filter, next Stage 2 insert the orange labeled pre-filter and lastly Stage 3 insert green post-filter.

Inserting the filter cartridge:
At the blue top of each filter cartridge find the side with two (2) notches. Line the notches up and insert filter cartridge into the filter head assembly. Once cartridge is fully inserted into the head turn clockwise and completely lock into position.

NOTE: Water flows from Left (Labeled: FEED) to Right (Labeled FAUCET)
Filters (by color) from Left to Right: Blue, Orange, Green

Step 2
Once filter system has been fully assembled, mark pilot holes using the bracket as a template.

Step 3
Using a drill bit or punch, drill a hole or punch as a starter hole to catch the mounting screws.

WARNING: ALTERNATIVE FASTENING METHOD MAY BE REQUIRED FOR PLASTER BOARD, PARTICLE BOARD OR SIMILAR MATERIAL INSTALLATION. USE SAFETY GLASSES OR OTHER EYE PROTECTION TO PREVENT POSSIBLE EYE INJURY DUE TO FLYING PARTICLES.

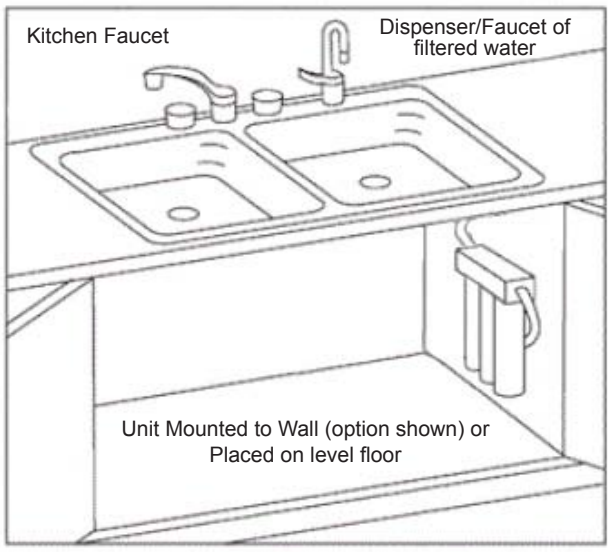
Step 4
Set mounting screws (provided) with screw driver. Leave a 1/4" gap between the screw head and mounting surface to allow the bracket to slide on easily.

Step 5
Slide the bracket over the screws and hang the unit. Make sure unit is level. Now make the connections of tubing to/from the system.

Helpful Hint:
Take a note of the Model # for the required warranty registration of this unit. This Service Guide will come in very handy when it's time for filter replacement.

Please Note:
Water flows from Left (Labeled: FEED) to Right (Labeled FAUCET)

Filters (by color) from Left to Right:
Blue, Orange, Green


Kitchen Faucet
Dispenser/Faucet of filtered water
Unit Mounted to Wall (option shown) or Placed on level floor
Inlet from Cold Inlet/Supply Connection (angle stop not shown)

strictly for illustration purposes only

Supplied Professional Connection

Professional Installation is Strongly Recommended

The supplied fitting is a John Guest Angle Stop Valve
which connects between the supply valve and riser to the main water supply line*.

Instructions from the bag containing the supplied connection

From parts bag locate: Angle Stop Valve
5 feet of red or orange 1/4" tubing (the proper tubing from the water supply to the system)

Step 1
BEST METHOD: Shut off the main water supply to the house and open the kitchen faucet to relieve water pressure in the hard pipe. Once water stops flowing from the kitchen faucet, shut off the water supply at brass or chrome supply valve. This is the shut off valve for the cold water side of the faucet under the sink (see illustration)

NOTE: Shutting the angle stop only, still leaves water in that pipe.

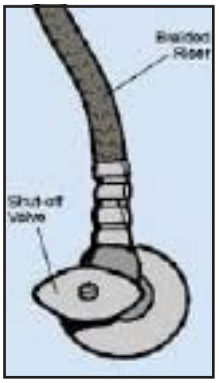
Step 2
Disconnect riser from brass or chrome supply valve.
This is the cold water line that feeds your existing kitchen faucet.

Step 3
Ensure that the sealing gasket is fully seated into the angle stop valve female thread.

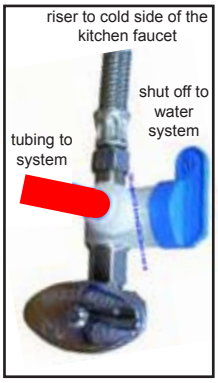
Step 4
Install angle stop valve on supply valve.

Step 5
Connect the riser to the angle stop valve.

Step 6
Fully insert red tubing into the quick connect fitting on the side of the angle stop valve.



Pictured:
Example of shut off valve and riser up to the cold side of the kitchen faucet typically found under the sink

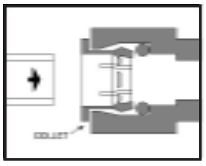


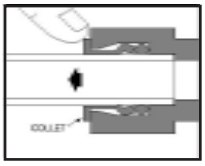
Pictured:
Example of shut off valve and riser up to the cold side of the kitchen faucet with the properly installed angle stop valve

To Insert: Make sure tubing has an even edge than press tubing in firmly and completely

Never Pull Tube Out To Remove

Push Collet In To Release





To Test Fitting:

Give a Gentle "Tug" To Insure Proper Connection

See All
Cautions, Warnings and Inspections

CAUTION: USE ONLY COLD WATER LINE. NOT INTENDED FOR SUPPLY BY HOT WATER.

After complete installation of the system, open main water supply to the house and open all valves and check for any leaks.

If needed, please refer to the John Guest Speedfit Installation Guide and Technical Check List for all other information or visit their website @ www.johnguest.com

Angle Stop Valve (ASVPP1LF)
NSF 51 Compliant
LEAD FREE - Meets AB1953

*Even though this connection can be used in over 90% of household applications, EWS, Inc. can not anticipate all the different locations, applications and materials used by your builder and/or plumbing contractor or any pre-existing situations regarding your household or sink piping and cannot be responsible for additional parts that may be necessary. Proper connection should meet all local codes. If necessary contact a qualified licensed plumber for another part or method to properly install this system.

Connection of Tubing from Supply and to Dispenser/Faucet

Step 1
This system may have come with sample plugs. If so, please remove correctly by following instructions below before installation.

WARNING:
NEVER ATTEMPT TO REMOVE TUBING OR SAMPLE PLUGS BY JUST PULLING.
Follow simple instructions illustrated below to remove properly.

INSPECT:
Inspect the fitting for any damage from shipping, handling and/or delivery. STOP, if collet is damaged in any way; call, fax or e-mail customer service for a replacement fitting.

Step 2
Make the Connections from Unit to Inlet/Supply Connection
Connect the orange/red tubing from the installed Inlet/Supply Connection to the location on the unit labeled "FEED" to the left of Stage 1. This is the raw supply water into the system. Insert and press the tubing firmly and completely into the fitting.

Step 3
Make the Connections from Unit to Faucet/Dispenser
Connect the blue tubing from the installed Dispenser/Faucet to the location on the unit labeled "FAUCET" to the right of Stage 3. This is the filtered water line. Insert and press the tubing firmly and completely into the fitting.

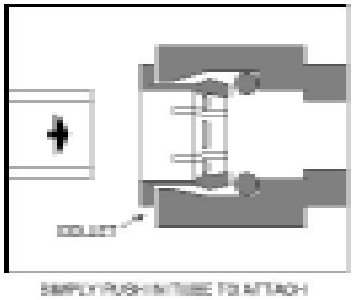
WARNING:
Install with the "FEED" (in) and "FAUCET" (out) as labeled. Make sure never to reverse directions.

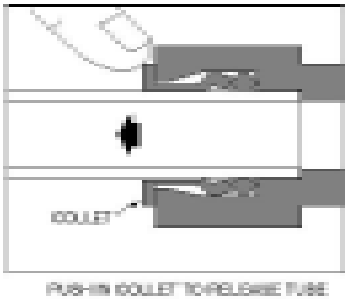
Never Pull Tube Out To Remove

Push Collet In To Release

To Insert, Press Tubing In Firmly and Completely

Make sure tubing end is straight and not flattened





Test Integrity of Fitting:

Give a Gentle "Tug" To Insure Proper Connection

See All Cautions, Warnings and Inspections

CAUTION:
Always leave the tubing provided to allow lifting the unit for filter replacement and maintenance.Make sure tubing has gentle curves. Roll and secure as needed. Do not bend or kink tubing. We do not recommend shortening the tubing, however, If needed, at end, cut tube straight and do not flatten. Avoid any tubing contact to hot water line.

WARNING:
NEVER ATTEMPT TO REMOVE TUBING BY JUST PULLING. Follow simple instructions illustrated above to remove properly.

INSPECT:
Upon installation, inspect the connection and give the tubing a gentle "tug" to insure proper connection and integrity of the fitting.

Inspect the fitting for any damage from shipping, handling, delivery, and/or installation.
STOP, if collet is damaged in any way; call, fax or e-mail customer service for a replacement fitting.

System Start-Up and Operation Procedures

A proper start-up insures the system is without issues.
If anything is discovered, this is the time to discover it and correct any problems or questions that arise.
Lack of any, or a proper, start-up will void the warranty.

Step 1 For Essential DWS with UV Upgrade Only
Connect UV lamp cord and plug in transformer unit to typical 110v electric outlet. (DWS-UV only)

NOTE:
Electrical outlet must be dedicated and unswitched. Be aware of any GFI outlets and the need to reset. Surge supression highly recommended.

Step 2
Pull up and lock dispenser/faucet handle (if using another type of dispenser - put into open position). This will allow water to flow in the open position. Turn off water supply to other devices. Do not make this water available to any ice-makers, refrigerators or any other devices until the system is completely flushed and running clear.

Step 3 **Slowly** - Turn on or open any main water supply which was shut off earlier.

Step 4
Open or make sure there is inlet water supply to the system. Water will begin to flow from dispenser/faucet. Initially it may sputter until it reaches full flow. Allow system to run steadily for approximately 2 minutes or more, if needed. This will wash carbon fines and air from the system. End this flushing of the system once water runs clear. System is now available to use as normal. Open water supply to other devices, if applicable.

NOTE:
If you draw your water into a glass and it appears to be cloudy, it's only air and nothing bad. Let the glass sit and watch the air rise and dissipate. The filter cartridges used are full bed depth. The carbon (GAC) cartridges have a great deal of surface area. With usage, it may take 24-48 hours for this to correct itself.

Step 5
Inspect for leaks at all connections, fittings and/or housings. If a problem exists, please shut off water supply to the system and consider the following solutions:

- Plumbing connections at the inlet/supply connection or angle stop.
  Please review these plumbing procedures and correct.
- Plumbing connections to dispenser/faucet and any other fixtures or cross-connections. Please review and correct.
- Inspect for leaks at all unit connections such as connections between housings, UV housing and connections (if applicable), cartridge housings. Report any issues for assistence or needed part(s).
- Inspect for leaks at the labeled "FEED" and "FAUCET" connections between the supplied tubing and the quick connect fittings. To insure proper connection, give a light "tug" (not a hard pull) on tubing to check the grip on all fittings.

■ If any damage was identified in shipping or handling. You'll need to make a claim with the shipper, as indicated on our Packing Materials, our Packing Slip and the published General Terms and Standard Conditions of Sale.

■ If you have identified a problem, please contact our offices. Let us know if we can offer advice on a plumbing issue that may not be related to the actual unit, or a question or issue that may be unit related. If in need of a part under warranty we can readily send it. Parts (original only) needed out of warranty can be obtained through your contractor, local distribution or at www.waterontheweb.com.

WARNING: Maximum pressure is 75 PSI. Pressure unregulated can surge or exceed the maximum rating on this and many items in the home. High pressure creates a water hammer or banging pipes. It's also the reason to use stainless hoses for washer machine connections and not the rubber. A pressure reducing valve (PRV) at your main water service line (if not code) is greatly recommended by many manufacturers' of many different household items, plumbing products and appliances and must be checked annually. A point of use (sink location) pressure limiting valve is also available.

Register this Product - It is a Requirement for Warranty

- Familiarize yourself with the system, its' replacement filters and maintenance.
  To Register, take note of the Model # found on the unit's bracket
- Understand your system's capabilities
- See water treatment options for protecting you, your family, and your home by EWS, Inc.
- **Register Your System**

Replacement of Filter Cartridges

It is recommended that filters be changed at least annually or more frequently based on usage and local water conditions. The quantity and quality of the water processed effects the life of the filters.

Step 1
Close inlet water supply to the system.

Step 2
Open dispenser/faucet. Lock handle in the up position and/or allow water to flow (water should stop in a short time) and keep open to relieve pressure.

CAUTION:
WATER WILL BE PRESENT WHEN FILTERS ARE CHANGED.
A pan, towel, etc. should be placed under the system to catch any water.

Step 3
Turn filter cartridge counterclockwise until it stops. Pull down (Hint: it may benefit from a little "wiggle")

Step 4
Remove filter cartridge and dispose, preferrably by recycling the cartridge.

Step 5
Insert new filter cartridges, Starting from the left or "FEED" side, Stage 1 insert the blue labeled pre-sediment filter, next Stage 2 insert the orange labeled pre-filter and lastly Stage 3 insert green post-filter. NOTE: Filters (by color) from Left to Right: Blue, Orange, Green

Inserting the filter cartridge: At the blue top of each filter cartridge find the side with two (2) notches. Line the notches up and insert filter cartridge into the filter head assembly. Once cartridge is fully inserted into the head turn clockwise and completely lock into position.

CAUTION:
Inspect o-rings at cartridge top. Make sure they are clean, free of any debris and not damaged or kinked. Make sure it is correctly seated into the channel before replacement.

Step 6
FOLLOW SYSTEM START-UP PROCEDURES AND FOLLOW PROPER TUBING CONNECTION INFORMATION

Annual Replacement of UV Lamp (Model No. DWS-UV Only)

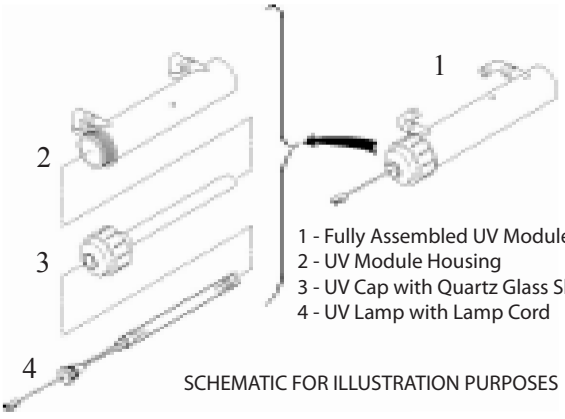
Step 1:
Unplug the transformer. Then disconnect the UV lamp cord.

Step 2:
Pull firmly on the UV lamp tail only to remove the lamp.
Do Not remove cap at top of UV Module

Step 3:
Insert and firmly press new UV lamp into the top of the cap.
Reconnect UV lamp cord.

Step 4:
Reconnect UV lamp cord. Plug in unit transformer.

WARNING:
DO NOT DISCONNECT UV MODULE FROM THE FACTORY CONNECTIONS AND DO NOT OPEN UV CAP FROM UV MODULE FOR TYPICAL UV LAMP REPLACEMENT.



1 - Fully Assembled UV Module
2 - UV Module Housing
3 - UV Cap with Quartz Glass Sleeve
4 - UV Lamp with Lamp Cord

SCHEMATIC FOR ILLUSTRATION PURPOSES

Caution - Please Note: Complete UV Housing replacement is recommended by manufacturer every 3 years.
The part with lamp included can be purchased with filter replacements when applicable.

Filter and UV Lamp Replacements

Correct set of filters for Model No. DWS
Order Complete Set Model No. F.SET.DWS

F-PRESED	Stage 1 - 5 micron Pre-Sediment Filter Cartridge	(blue label)
F-GAC	Stage 2 - Pre-Filter Advanced Carbon Cartridge	(orange label)
F-GAC-B	Stage 3 - Post-Filter Carbon Block Cartridge	(green label)

Correct set of filters for Model No. DWS-UV
Order Complete Set Model No. F.SET.DWS-UV

F-PRESED	Stage 1 - 5 micron Pre-Sediment Filter Cartridge	(blue label)
F-GAC	Stage 2 - Pre-Filter Advanced Carbon Cartridge	(orange label)
F-GAC-B	Stage 3 - Post-Filter Carbon Block Cartridge	(green label)
F-LAMP	UV Lamp Replacement for Upgraded DWS System with UV Disinfection	

Replacement of all filters are based on local water conditions and usage and should be replaced as needed. Do not exceed one year. UV lamp replacement annually (or, as needed within the year)

Caution - Please Note:

Complete UV Housing replacement is recommended by manufacturer every 3 years.
The part (# P-H-UV-4PIN) with lamp included can be purchased with filter replacements when applicable.

Ordering Filters, UV Lamp Replacements, and Parts

There are several ways to obtain and order filter replacements for your unit.

1. Contact your builder, plumbing contractor and/or your installer that provided the product.
2. Contact the kitchen & bath showroom, distributor, and/or retailer where you purchased the product
2. Order online from an authorized internet distributor.

Go to our Corporate Site @ www.ewswater.com or contact EWS Customer Service and we can direct you to someone who may assist you. As a manufacturer, EWS, Inc. does not sell direct to end customers, only into distribution.

The most convenient way to purchase the correct filters or parts for your unit may be to visit an authorized online distributor such as www.waterontheweb.com

Thank you and we hope we have been of assistance in this matter.
EWS, Inc. and Environmental Water Systems – Customer Service

Authorized EWS internet retailers will place their order with EWS, Inc., just like any EWS bricks-and-mortar distributor, and will ship your order directly to the address you designate in the online store.

Trouble Shooting Guide - Drinking Water Filtration Systems

Problem	Possible Causes	Solution
Any or All Leaks	Excessive pressure or pressure surges	Pressure reducing valve (PRV) at main water supply to maintain pressure at or below 75 PSI or the addition of a Pressure Limiting Valve (item# FMP-60) on the inlet tube prior to the point of use unit
Leaks at Tubing Connections	Various causes to inspect	•Follow instructions for Connection of Tubing.
Leak at inlet fitting (labeled "Feed") or Leak at outlet fitting (labeled "Faucet")	•Is the tubing cut with a straight end to grab squarely? •Is the tubing inserted completely into fitting?	Access the filter unit, remove tubing by depressing the collet and pulling tubing out. Using a utility razor knife, squarely cut 1/2" off tubing from the end. Make sure end of tubing is not flattened Reinsert the tubing into the fitting as far as possible. Check for leaks.
	•Broken collect or fitting •Is there a problem with the collet and the quick-connect fitting? •Tubing incorrectly removed •Damaged in shipping,handling, and/ or delivery	•Tug on tubing (do not pull hard) to check fitting and the integrity of the connection •Upon inspection, prior to install or a result of proper start-up and inspection and fitting is damaged, then replace part Replace part
Leak at 90 degree elbow connection(s) Leak at plastic compression fitting at UV Module (DWS-UV only)	Damaged in shipping,handling, and/ or delivery Damaged in shipping,handling, and/ or delivery	Replace part
No water	Water supply is off	•Turn main water supply on, •Turn water supply at angle stop •Angle Stop Valve not open, •Open dispenser/faucet
Not enough water	Low water pressure	Unit may not operate properly at less than 25 PSI feed line pressure (max: 75 PSI)
Water flow is restricted	Kinked or bent tubing	Make longer loop with tubing to remove kink or bend
Low flow from unit	Clogged prefilter cartridge	If there is flow through the kitchen faucet than there is a need to replace sediment and/ or other filters based on water conditions and usage
Leak at the supplied faucet	Spout needs to be re-inserted	•Spout pulls out from faucet body that's why it swivels. Spout has 2 o-rings at base and is inserted completely into bottom of body to prevent leaking.
Leak at the supplied faucet base by handle (brass "T")	O-ring issue at inserted brass piece or "T" that holds & operates handle	•Replace the supplied faucet dispenser (item# depends on any finish option)
Leak at the connection to faucet	Dispenser connections need to be properly made	•Check connections at various locations and re-connect, re-insert, tighten and/or correct.
Leak at another Mfg's faucet and/or connection to another device	All connections need to be properly made	•Consult with Mfg of other product and/or installer to check connections at various locations and reconnect, re-insert, tighten and/or correct.
Leak at Inlet Water Supply Connection	Various causes to inspect. Angle Stop Valve may not be applicable or installed correctly	•Check connections and/or correct. •Follow the inlet supply water instructions in this manual
Leak at cartridge housing	Misaligned, damaged or missing o-ring	•Locate and align O-ring(s) into groove at top •Replace filter cartridge or Remove filter cartridge and re-insert and lock correctly
	Cracked housing due to pressure issues, misaligned filter replacement.	•Replace filter cartridge and correct issue that caused the problem (no plumbing needed) •Remove filter cartridge and re-insert and lock correctly
Leak at UV housing	At Cap: Misaligned, damaged or missing o-ring Cracked housing due to pressure issues, misuse, and/or overtightening	•Locate and align O-ring into groove inside cap •Replace part (item # P-H-UV-ONLY or P-H-UV-4PIN which includes lamp) and correct issue that caused the problem (no plumbing needed)
UV not working	Lamp damaged, lamp cord has not been connected, transformer is not plugged in, connected to wrong type of outlet or lamp has burned out	•Connect lamp cord and/or Plug in transformer. •Make sure unit plugged into an unswtiched electrical outlet. Check GFI reset. Surge suppression is highly recommended •Replace UV Lamp
Unpleasant taste and/or odor Metallic flavor Discoloration Rotten egg smell from water	•Need to replace filters •System was idle, stored or misused for a long period of time. •System under unfavorable conditions or changing water conditions	•Replace filters and follow start up procedures •Flush system by running water, replace filters •Determine what changed in your water supply and Flush, Replace or change type of water treatment system based on local water conditions. Call your municipality or have your well tested.
	•Hydrogen sulfide, iron, manganese is in the household water supply •System misapplied	•Hydrogen sulfide, iron and manganese must be removed from household water supply before filter system. Visit our web site for other systems. •Specify the correct system for the application
Cloudy water	•New installation, changing filters •Open/close and open of water supply to home or in home	It is simply - air. Check by filling glass and watch air dissipate. Run and flush system for several minutes. Sometimes it takes 24 - 48 hours to totally clear due to the full bed depth of our filters

Warranty Notification

Notification:
This warranty is referenced by EWS, Inc. in all literature, addressed in General Terms and Standard Conditions of Sale, and is published in its entirety in all EWS, Inc. product manuals, websites, and in all service guides supplied with all product.

Limited Warranty:
EWS, Inc., a Nevada corporation, hereby warrants all products to the original consumer purchaser to be free from defects in material and workmanship as stated in the following paragraphs:

• All residential point of use: countertop filtration, in-line filtration, undercounter drinking water filtration, shower filtration, residential reverse osmosis, and canister and filter cartridge point of entry pre-sediment and/or filtration units or systems for one year from date of purchase.

• All residential point of entry: pH decreasing and softener (resin and ion-exchange) systems, Environmental (EWS) Water Systems, Iron Removal units, CWL whole-home (filtration media) systems, pH increasing reagent (sacrificial media) units for 10 years on the tank and riser, 10 years on the ICN conditioner(s) (if applicable) and 5 years on the valve head from date of purchase.

• All commercial systems: Dependent on specification and application, please consult with EWS, Inc. upon specification.

• All filtration medias, resins, cartridges, uv lamps, and/or membranes are not covered by any warranty. Filter media, resin, cartridge, uv lamp, and/or membrane replacement or maintenance schedule will vary and must be replaced, as necessary, as determined by usage and local water conditions.

Product performance may vary based on local water conditions, proper product specification and application, proper plumbing application, setup, installation, startup, maintenance and/or usage. To ensure proper operation, follow all setup, installation, start-up and maintenance procedures as detailed in all service guides.

Not intended for use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after unit(s). The contaminants or other substances removed or reduced by these and any other water filtration or treatment devices are not necessarily in your water. To confirm the presence of any primary and secondary contaminants, have your water supply completely analyzed by an independent and approved facility or if applicable, contact your local water utility for information. Aesthetic, non-health related, or constituents without set federal standards may be part of water testing but are insufficient to determine proper application of any water filtration or treatment device.

EWS, Inc. will replace, free of charge, during the warranty period, any part which proves defective in material and/or workmanship under proper product and plumbing specification and application, normal and proper installation, use, service and proper care as published in detail in all service guides included with product. Labor charges are excluded from any warranty service or repair and are not the responsibility of EWS, Inc. Shipping charges may apply to delivered replacement parts or materials. Charges may also apply for the cost of any replacement media, resin, cartridges, uv lamp and/or membrane from any warranty service or repair. Information can be obtained at any time through a local dealer, distributor, representative or direct from EWS, Inc. and/or on-line at; www.ewswater.com. Replacement parts can be obtained from your local dealer, distributor, online or contractor.

This warranty is the exclusive warranty granted by EWS, Inc. and is in lieu of all other warranties of merchantability and fitness for a particular purpose and is further limited to defective parts replacement only. Labor charges and/or damage incurred in setup, installation, and startup, or repair, or replacement, as well as, incidental and consequential damages connected there with, are excluded, and are not the responsibility of, and will not be paid by EWS, Inc.

This warranty is void for any damages due to improper product and/or plumbing specification and/or application, misuse, abuse, neglect, accident, acts of nature, action of any military or civil authorities, improper handling and transportation, or improper setup, installation, and/or startup, or any violation of instructions furnished by EWS, Inc., or any replacement parts other than genuine parts or replacements supplied by EWS, Inc.

This warranty is not a warranty of merchantability, fitness, taste, aesthetics, and/or performance that may be subject to improper product and/or plumbing specification and/or application, misuse, abuse, neglect, accident, acts of nature, action of any military or civil authorities, improper handling and transportation, or improper setup, installation, and/or startup, or any violation of instructions furnished by EWS, Inc.

This warranty is not a warranty of merchantability, fitness, taste, aesthetics, and/or performance that may be personal and of subjective opinion and that does not relate to the performance of any system.

Warranty Information and the Purchaser's Responsibility

Keep a record of the purchase receipt and/or installation receipt. Purchaser is required fill out warranty registration form(s) on applicable product(s) and register all product by either online @ www.ewswater.com, telephone, postal delivery, fax, e-mail (either register@ewswater.com or information provided to customerservice@ewswater.com). **Failure to do so voids the warranty unless restricted by state regulations.**

EWS, Inc. does not sell, show or make available any information on any consumer in our database. This database is to ensure, if needed, proper warranty service, and good customer service for years to come. Please see our privacy policy published in our website at www.ewswater.com.

Know Your Water:

• If on a municipal system, large or small, it is your right as a consumer to have access to the most recent test results and to expect adherence to federal guidelines, as well as any state or local requirements. Any problems should be reported to the appropriate agencies. Please acquire those municipal test results to become an informed consumer.

• If on an individual well, have your water completely and independently tested. Local code may require a simple test for coliform bacteria to approve a well, however you may be unaware of potential problems for you and/or your home. A local water salesman is looking to close a sale and is going to test for hardness minerals and a few simple and obvious issues, which may or may not be contamination problems. Their solution is almost always the same and yet may provide no resolution to any true problems. Obtain our "Guide for the Private Well Owner" on our website; www.ewswater.com. Review our section on well water testing and applications in our complete catalog with your local distributor, dealer, or our representative or visit our website.

• WARNING:
Some restrictions apply to the use of softeners. Contact your local municipal water district or Gov't Agency. Brine discharge is already restricted on, or may be a problem for, septic applications and waste water treatment facilities. Since some states have already restricted softeners to metered valves to prevent excessive brine discharge, EWS, Inc. only provides metered valving in its line of softeners.

Restrictions or an outright ban may also apply to hot-side only, salt-exchange tanks or services. Local water dealers and other organizations do not inform consumers of these issues and believe these rules are unenforcable. The consumer is ultimately responsible.

Softeners may also provide warranty issues with pools and spas, certain other products and finishes. Softened water should not be used for drinking, cooking, pets or plants and is usually bypassed or "looped away" from the cold side of the kitchen sink. Reverse osmosis, which also has its drawbacks and issues with other products and materials, may be used to remove the salt from the water that the softener put in at the kitchen sink, yet may be misapplied for the actual local water conditions.

Any problems of water quality, or the fitness of any EWS, Inc. product that is associated with any mechanical, construction, application, installation, and/or environmental issue(s) (ie: flow rates, line pressure, piping materials, broken supply lines, changing water conditions; well or municipal water quality, et. al.), known or unknown, of the home or facility will not be considered by EWS, Inc. until such issue(s) have been resolved.

Responsibility for the proper product and/or plumbing specification, application and/or installation of any device manufactured by EWS, Inc. lies with the consumer, their builder contractor, plumbing sub-contractor and any other installer of choice. Items do not specify and/or install themselves. EWS, Inc. has provided many sources to acquire information on the proper application of systems and their installation prior to any purchase. EWS, Inc. manufactures a complete product line of point of use water filtration systems and point of entry filtration, softening and/or conditioning systems and/or appliances.

EWS, Inc. and the distributors of EWS, Inc. will stand behind the warranties of materials and workmanship. However, EWS, Inc. and the distributors of EWS, Inc. and the Environmental Water Systems Product Line do not bear any responsibility for improper applications of product and/or improper installation. It is for this reason that EWS, Inc. provides complete information on all product for your understanding, specification, application and selection, and proper plumbing application and installation.

To obtain warranty service support, contact your local dealer or contractor from whom you obtained the product or contact EWS, Inc., Customer Service, via phone, fax, or email.

THE SPECTRUM IS THE RIGHT PRODUCT FOR YOU, YOUR FAMILY & YOUR HOME.

SPECTRUM – THE PROFESSIONAL SERIES

Our most versatile systems, showcased by the National Association of Home Builders (NAHB) and New American Showcase Home. World-class EWS performance in a contractor-friendly install package. All Spectrum Series systems utilize our advanced, user-friendly digital valve head and adjustable bypass, which fits over 90% of homes in the United States and accommodates line sizes 3/4" to 1 1/2" without inhibiting flow rate or pressure. A Spectrum installation is a simple process, much like installing a water heater. Once installed, the self-cleaning Spectrum systems provide maintenance-free filtration for years, allowing you to enjoy the convenience, protection, and health benefits of the highest quality filtered water at every tap, every day.

DO YOU HAVE HARD WATER?

Some of us have harder water than others, and EWS generally considers 6 grains (102 ppm or mg/l) of hardness to be on the lower end of hard water. Select YES if you have hard water issues such as excessive spotting or mineral build-up in pipes, faucets and water heaters.

YES

DOES YOUR CITY USE CHLORINE OR CHLORAMINE?

EWS SERIES Whole Home Water Filtration and Conditioning for Hardness Minerals.

SELECT BY USAGE.**

CHLORAMINE

EWS CC 1465

Model #: EWS-CC-1465-7
Select this system if you have ALL of the following:**
- 3 bathrooms or less
- 4 people or less
- 1 water heater
- Up to 2 ppm chloramine

EWS CC 1865

Model #: EWS-CC-1865-7
Select this system if you have ANY of the following:**
- 3+ bathrooms
- 4+ people
- 1+ water heater
- 2+ ppm chloramine

CHLORINE

EWS SPECTRUM

Model #: CS-EWS-1354-7000
Pro Series. Our most versatile unit. Showcased by NAHB. Adjustable for 3/4" - 1 1/2" main water line. Up to 35 gpm.

The EWS Spectrum is the appliance that is applicable to the vast majority of homes on municipal water in the United States.

NO

DOES YOUR CITY USE CHLORINE OR CHLORAMINE?

CWL SERIES Whole Home Water Filtration for Water Without Hardness Issues.

CHLORINE

CWL SPECTRUM

Model #: CS-CWL-1354-7000
Pro Series. Our most versatile unit. Showcased by NAHB. Adjustable for 3/4" - 1 1/2" main water line. Up to 35 gpm.

SELECT BY USAGE.**

CHLORAMINE

CWL CC 1465

Model #: CWL-CC-1465-7
Select this system if you have ALL of the following:**
- 3 bathrooms or less
- 4 people or less
- 1 water heater
- Up to 2 ppm chloramine

CWL CC 1865

Model #: CWL-CC-1865-7
Select this system if you have ANY of the following:**
- 3+ bathrooms
- 4+ people
- 1+ water heater
- 2+ ppm chloramine

About 22% of people have tap water treated with chloramine (a corrosive combination of chlorine and ammonia), which requires more contact time (vs. chlorine) through a specialized filtration media to effectively filter it out of the water. EWS has designed four systems specifically for handling chloramine, which use our Pro Series valve that accommodates 3/4" - 1 1/2" main water lines up to 35 gpm. **Not sure if you have chloramine? Call your water district or EWS Customer Service at 702.256.8182 for friendly assistance. **Important Note:** Our specialized chloramine removal media (CRM) is incredibly effective on chlorine as well, so when in doubt, err on the side of caution and select a Chloramine System.

STOP

ARE YOU ON WELL WATER?

If you are on private or community well water, you need information to determine any water issues and their solutions. Well water requires complete and independent testing. Call EWS Customer Service at 702.256.8182 or visit **EWSWATER.COM** for more information.

The EWS, Inc./Environmental Water System Product available through:

Authorized Kitchen & Bath Showrooms, Appliance Showrooms, Building & Plumbing Wholesale Supply Locations and their building, plumbing, HVAC and service contractors, and Authorized Online Distributors.

Contact Information:

EWS, INC.
Environmental Water Systems

ewswater.com

O: 702.256.8182 (M-F 8:30am-4:30pm PST)
E: customerservice@ewswater.com
F: 702.256.3744

Mailing Address:
9101 W. Sahara Ave., #105-J8, Las Vegas, NV. 89117

Got a Question..?

Seriously...give us a call. We're here to help.

ALL FILTRATION PRODUCT PROUDLY MADE & ASSEMBLED IN THE USA

EWS is a Proud Contributor and Sponsor of Organizations Dedicated to Improving Health, Well-Being and the Environment

• Heart • Lung & Respiratory • Allergy & Asthma • Dermatology & Skin • Digestive: Crohn's & Colitis • • Oceans • Inland Water Ways • Wetlands • Forestry • Soil • Air •